

9 18 27 36 45 54  
 5' AGA ACG GTG AGG ATG ACC GAC GTA TAG GCG AGA GCC TAG GTA CGC CAT GCC AGG

63 72 81 90 99 108  
 TCA CCG GTC CGG CAA TTC CCG GGT CGA CCC ACG CGT CCG CTT GGA GGG ACG CTG

117 126 135 144 153 162  
 GGT TCA ACT TGA AGC CCT TCC ACA GAC ATT AAG TCG GTG AAA ACC ATT CAC TAG

171 180 189 198 207 216  
 GAG AGG AGA AAC ACA ATG GCC ACC AAG ACA GAG TTG AGT CCC ACA GCA AGG GAG

225 234 243 252 261 270  
 AGC AAG AAC GCA CAA GAT ATG CAA GTG GAT GAG ACA CTG ATC CCC AGG AAA GTT  
 M Q V D E T L I P R K V

279 288 297 306 315 324  
 CCA AGT TTA TGT TCT GCT CGC TAT GGA ATA GCC CTC GTC TTA CAT TTC TGC AAT  
 P S L C S A R Y G I A L V L H F C N

333 342 351 360 369 378  
 TTC ACA ACG ATA GCA CAA AAT GTC ATC ATG AAC ATC ACC ATG GTA GCC ATG GTC  
 F T T I A Q N V I M N I T M V A M V

387 396 405 414 423 432  
 AAC AGC ACA AGC CCT CAA TCC CAG CTC AAT GAT TCC TCT GAG GTG CTG CCT GTT  
 N S T S P Q S Q L N D S S E V L P V

441 450 459 468 477 486  
 GAC TCA TTT GGT GGC CTA AGT AAA GCC CCA AAG AGT CTT CCT GCA AAG TCC TCA  
 D S F G G L S K A P K S L P A K S S

495 504 513 522 531 540  
 ATA CTT GGG GGT CAG TTT GCA ATT TGG GAA AGG TGG GGC CCT CCA CAA GAA CGA  
 I L G G Q F A I W E R W G R P Q E R

549 558 567 576 585 594  
 AGC AGA CTC TGC AGC ATT GCT TTA TCA GGA ATG TTA CTG GGA TGC TTT ACT GCC  
 S R L C S I A L S G M L L G C F T A

603 612 621 630 639 648  
 ATC CTC ATA GGT GGC TTC ATT AGT GAA ACC CTT GGG TGG CCC TTT GTC TTC TAT  
 I L I G G F I S E T L G W P F V F Y

657 666 675 684 693 702  
 ATC TTT GGA GGT GTT GGC TGT GTC TGC TGC CTT CTC TGG TTT GTT GTG ATT TAT  
 I F G G V G C V C C L L W F V V I Y

FIGURE 1A

|   |      |      |      |      |      |
|---|------|------|------|------|------|
| 711   | 720  | 729  | 738  | 747  | 756  |
| GAT GAC CCC GTT TCC TAT CCA TGG ATA AGC ACC TCA GAA AAA GAA TAC ATC ATA |      |      |      |      |      |
| D D P V S Y P W I S T S E K E Y I I                                     |      |      |      |      |      |
| 765   | 774  | 783  | 792  | 801  | 810  |
| TCC TCC TTG AAA CAA CAG GTC GGG TCT TCT AAG CAG CCT CTT CCC ATC AAA GCT |      |      |      |      |      |
| S S L K Q Q V G S S K Q P L P I K A                                     |      |      |      |      |      |
| 819   | 828  | 837  | 846  | 855  | 864  |
| ATG CTC AGA TCT CTA CCC ATT TGG TCC ATA TGT TTA GGC TGT TTC AGC CAT CAA |      |      |      |      |      |
| M L R S L P I W S I C L G C F S H Q                                     |      |      |      |      |      |
| 873   | 882  | 891  | 900  | 909  | 918  |
| TGG TTA GTT AGC ACA ATG GTT GTA TAC ATA CCA ACT TAC ATC AGC TCT GTG TAC |      |      |      |      |      |
| W L V S T M V V Y I P T Y I S S V Y                                     |      |      |      |      |      |
| 927   | 936  | 945  | 954  | 963  | 972  |
| CAT GTT AAC ATC AGA GAC AAT GGA CTT CTA TCT GCC CTT CCT TTT ATT GTT GCC |      |      |      |      |      |
| H V N I R D N G L L S A L P F I V A                                     |      |      |      |      |      |
| 981   | 990  | 999  | 1008 | 1017 | 1026 |
| TGG GTC ATA GGC ATG GTG GGA GGC TAT CTG GCA GAT TTC CTT TCA ACC AAA AAG |      |      |      |      |      |
| W V I G M V G G Y L A D F L L T K K                                     |      |      |      |      |      |
| 1035  | 1044 | 1053 | 1062 | 1071 | 1080 |
| TTT AGA CTC ATC ACT GTG AGG AAA ATT GCC ACA ATT TTA GGA AGT CTC CCC TCT |      |      |      |      |      |
| F R L I T V R K I A T I L G S L P S                                     |      |      |      |      |      |
| 1089  | 1098 | 1107 | 1116 | 1125 | 1134 |
| TCA GCA CTC ATT GTG TCT CTG CCT TAC CTC AAT TCC GGC TAT ATC ACA GCA ACT |      |      |      |      |      |
| S A L I V S L P Y L N S G Y I T A T                                     |      |      |      |      |      |
| 1143  | 1152 | 1161 | 1170 | 1179 | 1188 |
| GCC TTG CTG ACG CTC TCT TGC GGA TTA AGC ACA TTG TGT CAG TCA GGG ATT TAT |      |      |      |      |      |
| A L L T L S C G L S T L C Q S G I Y                                     |      |      |      |      |      |
| 1197  | 1206 | 1215 | 1224 | 1233 | 1242 |
| ATC AAT GTC TTA GAT ATT GCT CCA AGG TAT TCC AGT TTT CTC ATG GGA GCA TCA |      |      |      |      |      |
| I N V L D I A P R Y S S F L M G A S                                     |      |      |      |      |      |
| 1251  | 1260 | 1269 | 1278 | 1287 | 1296 |
| AGA GGA TTT TCG AGC ATA GCA CCT GTC ATT GTA CCC ACT GTC AGC GGA TTT CTT |      |      |      |      |      |
| R G F S S I A P V I V P T V S G F L                                     |      |      |      |      |      |
| 1305  | 1314 | 1323 | 1332 | 1341 | 1350 |
| CTT AGT CAG GAC CCT GAG TTT GGG TGG AGG AAT GTC TTC TTC TTG CTG TTT GCC |      |      |      |      |      |
| L S Q D P E F G W R N V F F L L F A                                     |      |      |      |      |      |
| 1359  | 1368 | 1377 | 1386 | 1395 | 1404 |
| GTT AAC CTG TTA GGA CTA CTC TTC TAC CTC ATA TTT GGA GAA GCA GAT GTC CAA |      |      |      |      |      |
| V N L L G L L F Y L I F G E A D V Q                                     |      |      |      |      |      |

FIGURE 1B

1413 1422 1431 1440 1449 1458  
GAA TGG GCT AAA GAG AGA AAA CTC ACT CGT TTA TGA AGT TAT CCC ACC TTG GAT  
E W A K E R K L T R L

1467 1476 1485 1494 1503 1512  
GGA AAA GTC ATT AGG CAC CGT ATT GCA TAA AAT AGA AGG CTT CCG TGA TGA AAA

1521 1530 1539 1548 1557 1566  
TAC CAG TGA AAA GAT TTT TTT TTC CTG TGG CTC TTT TCA ATT ATG AGA TCA GTT

1575 1584 1593 1602 1611 1620  
CAT TAT TTT ATT CAG ACT TTT TTT TGA GAG AAA TGT AAG ATG AAT AAA AAT TCA

1629 1638  
AAT AAA ATG ATA ACT AAG AAT GC 3'

FIGURE 1C

1 MOVDE -- TLIPRKVPSL -- -- -- -- -- 754412  
1 MOIN -- -- RUPKVPGF -- -- -- -- -- GI 450532  
1 MEFRQEFRKLAGEALRIHRLEKRQEGAETLESADGR GI 507415  
16 -- -- -- -- CSA -- -- RYGIALV -- LHFCNETTIA 754412  
16 -- -- -- -- CSF -- -- RYGLSL -- VHCCNVIITA GI 450532  
41 PVTTHRDPPVDGTCFGLPRYILAIMSGLGFC -- ISFG GI 507415  
36 QNVIMNITMVAMVNSTSPOSOLNDSEVL -- -- -- -- -- 754412  
36 QRACLNITMVMVNSTDHGLPNTSTKLLDNIKNPMYNW GI 450532  
79 IRCNLGVAIVSMVNNSTH -- -- RGGHV -- -- VQKAQFNWE 507415  
65 -- -- -- -- PVDSFGGLSKAPKSL -- -- -- -- -- 754412  
76 SPDIQGILSSTSYGVIIQVPGYESGIYSTKMIGFAL GI 450532  
112 DPETVGLIHGSFFWGIVTQIPGGFICQKFANRVFGPAI GI 507415  
80 -- -- -- -- PAKSSILGGQF -- -- -- -- -- 754412  
116 CLSSVLSLIPPAGIGVAVVVCRAVQGAQGIVATAQE GI 450532  
152 VATSTLNMLIPSAARVHGCVIFVRILQGLVEGVTPACH GI 507415  
91 AIMERWGPPOERSRLCSIALSGMLLGCFTAILIGGFISET 754412  
156 EIVKMAPHLERCRITSMSTSGFLLGPIVLVTGVICES GI 450532  
192 GIMSKMAPHLERSRATTAFCGSAGAVAMPLAGVLVY GI 507415  
131 LGWPFVFIFGGVCCLLWFVVIYDDPVSYPWISTSEK 754412  
196 LGWMVFYIFCACGAVCLLWFVLFYDDPKDHPCISISEK GI 450532  
232 SIGMSSVFVYGSFGIFWYIFWLLVSYESEALHPSISEER GI 507415  
171 EYISSLQQV -- -- GSSKQPLPIKAMLRSLPIWSICLGC 754412  
236 EYITSLVQQV -- -- SSSROSLPIKAILKSLPVWAISIGS GI 450532  
272 KIYIEDAIGESAKLMNPVTYFNTHWRRRFTSMPVYAIIVAN GI 507415

FIGURE 2A

207 F S H O W L V S T M V V Y I P T Y I S S V Y H V N I R D N G L L S A L P F I V A 754412  
 272 F T F F W S H N I M T L Y T M F J N S M L H V N I K E N G F L S S L P Y L F A GI 450532  
 312 F C R S W T F Y L L I S Q E A Y F E E V F G F E J S K V G L V S A L P H L V M GI 507415  
  
 247 W V I G M V G G Y L A D F L L T K K - F R L I T V R K I A T I L G S L P S S A L 754412  
 312 W I G N L A G Q L S D R F L T R N I L S V J A V R K L F T A A G F L L P A I F GI 450532  
 352 T I J V P I G Q I A D F L R S R H I M S T T N V R K L M N C G G F G M E A T L GI 507415  
  
 286 I V S L P Y L N S G Y I T A T A L L T L S C G L S T L C O S G I Y I N V L D I A 754412  
 352 G M C L P Y L S S T F Y S I V I F L I J A G A T G S F C L G G V F I N G L D I A GI 450532  
 392 L L V V G Y S H S K G V A I S - F L V L A V G F S G F A I S G F N V N H L D I A GI 507415  
  
 326 P R Y S S F L M G A S R G F S S I A P V I V P T V S G F L L S Q D P E F G W R N 754412  
 392 P R Y F G F I K A C S T L T G M I G G L J A S T L T G L I L K Q D D P E S A W F K GI 450532  
 431 P R Y A S I L M G I S N G V G T L S G M V C H I I V G A M T K K T R E E W Q Y GI 507415  
  
 366 V F F L L E A V N L L G L F Y L I F G E A D V O E W A K E R K L T R - - - - 754412  
 432 T F I L M A I N V T G L I F Y L J V A T E I Q D W A K E K Q H T R - - - - GI 450532  
 471 V F L I A S L V H Y G G V I F Y G V F A S G E K I O P W A E P E E M S E E K C G F GI 507415  
  
 401 - - - - - - - - - - - - - - - - 754412  
 467 - - - - - - - - - - - - - - - - GI 450532  
 511 V G H D Q L A G S D E S E M E D E V E P P G A P P P P S Y G A T H S T V Q P GI 507415  
  
 401 - - - - - - - - - - - - - - - - 754412  
 467 - - - - - - - - - - - - - - - - GI 450532  
 551 P R P P P P V R D Y GI 507415

FIGURE 2B

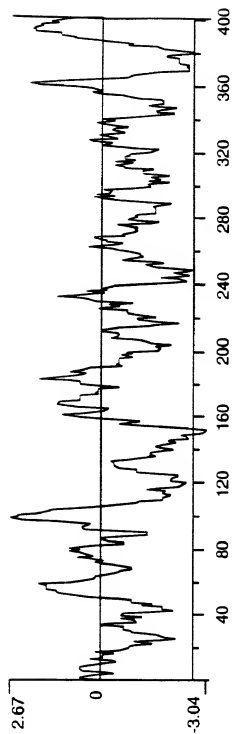


FIGURE 3A

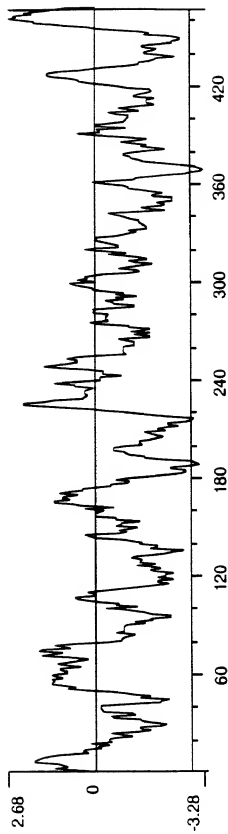


FIGURE 3B

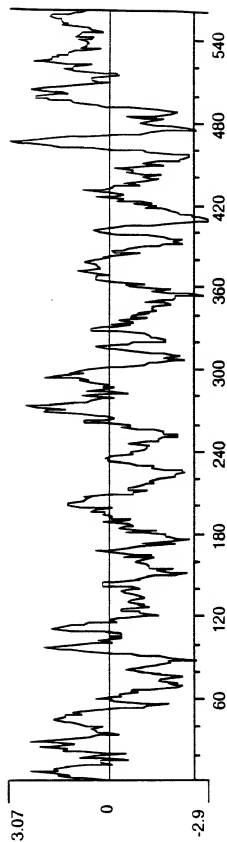


FIGURE 3C